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 * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

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=> file biosis medline caplus wpids uspatfull
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CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s sensor?
L1     2181767 SENSOR?

=> s l1 and nanoscopic
L2          335 L1 AND NANOSCOPIC

=> s l2 and pathway?
L3           66 L2 AND PATHWAY?

=> s l3 and conductiv?
L4           44 L3 AND CONDUCTIV?

=> s l4 and switch
L5           18 L4 AND SWITCH

=> s l5 and polymer?
L6           14 L5 AND POLYMER?

=> dup rem l6
PROCESSING COMPLETED FOR L6
L7            14 DUP REM L6 (0 DUPLICATES REMOVED)

=> d l7 bib abs 1-14

L7   ANSWER 1 OF 14  USPATFULL on STN
AN     2005:312597  USPATFULL
TI     Electrophoretic assembly of electrochemical devices
IN     Chiang, Yet-Ming, Framingham, MA, UNITED STATES
       Hellweg, Benjamin, London, UNITED KINGDOM
       Holman, Richard K., Belmont, MA, UNITED STATES
       Tobias, Steven M., Cambridge, MA, UNITED STATES
       Kim, Dong-Wan, Malden, MA, UNITED STATES
       Wartena, Ryan Craig, Cambridge, MA, UNITED STATES
PA     Massachusetts Institute of Technology, Cambridge, MA, UNITED STATES,
       02139 (U.S. corporation)
       A123 Systems, Watertown, MA, UNITED STATES, 02472 (U.S. corporation)
PI     US 2005272214      A1   20051208
AI     US 2005-108602     A1   20050418 (11)
RLI    Continuation-in-part of Ser. No. US 2002-206662, filed on 26 Jul 2002,
       PENDING Continuation-in-part of Ser. No. US 2001-21740, filed on 22 Oct
       2001, PENDING
```

PRAI US 2004-563026P 20040416 (60)
US 2004-583850P 20040629 (60)
US 2001-308360P 20010727 (60)
US 2000-242124P 20001020 (60)
DT Utility
FS APPLICATION
LREP WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE, BOSTON, MA, 02210-2211, US
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 17 Drawing Page(s)
LN.CNT 1425
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for making bipolar electrochemical devices, such as batteries, using electrophoresis. A bipolar device is assembled by applying a field that creates a physical separation between two active electrode materials, without requiring insertion of a discrete separator film or electrolyte layer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 2 OF 14 USPATFULL on STN
AN 2005:290596 USPATFULL
TI Nanoscale arrays, robust nanostructures, and related devices
IN Whang, Dongmok, Cambridge, MA, UNITED STATES
Jin, Song, Madison, WI, UNITED STATES
Wu, Yue, Cambridge, MA, UNITED STATES
McAlpine, Michael, Cambridge, MA, UNITED STATES
Friedman, Robin S., Cambridge, MA, UNITED STATES
Lieber, Charles M., Lexington, MA, UNITED STATES
PA President and Fellows of Harvard College, Cambridge, MA, UNITED STATES (U.S. corporation)
PI US 2005253137 A1 20051117
AI US 2004-995075 A1 20041122 (10)
PRAI US 2003-524301P 20031120 (60)
US 2004-551634P 20040308 (60)
DT Utility
FS APPLICATION
LREP WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE, BOSTON, MA, 02210-2211, US
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 2142
AB The present invention relates generally to nanotechnology and sub-microelectronic circuitry, and more particularly to nanoelectronics. One aspect of the invention is directed to nanostructures on substrates. In some cases, the substrate may be or comprise glass and/or **polymers**, and in some cases, the substrate may be flexible and/or transparent. The present invention is also directed, according to another aspect, to techniques for fabricating nanostructures on substrates. For example, monolayers of nanoscale semiconductors may be etched, e.g. photolithographically, to yield discrete and/or predetermined arrays of nanoscale semiconductors and other articles on a substrate. In one embodiment, the array may include hundreds, thousands, or more of electronic components such as field-effect transistors. Such arrays may be connected to electrodes using photolithographic techniques, and in some cases, without the need for registering individual semiconductor-metal contacts.

L7 ANSWER 3 OF 14 USPATFULL on STN
AN 2005:290554 USPATFULL
TI Nanoparticle optical storage apparatus and methods of making and using same
IN Chen, Wei, Stillwater, OK, UNITED STATES
PI US 2005253095 A1 20051117
AI US 2005-67373 A1 20050225 (11)

RLI Continuation of Ser. No. US 2002-223764, filed on 19 Aug 2002, PENDING
Continuation-in-part of Ser. No. US 2002-166313, filed on 6 Jun 2002, PENDING
PRAI US 2002-356542P 20020211 (60)
US 2001-313236P 20010817 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 1932
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates in general to nanoparticles exhibiting luminescence such as photostimulated luminescence or photoluminescence and optical switching processes based upon such properties, in more particular, the use of such photostimulated luminescence exhibiting nanoparticles and switching nanoparticle for optical storage apparatuses and **sensors** as well as methods of making and using same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 14 USPATFULL on STN
AN 2005:241387 USPATFULL
TI **Polymer** binders for flexible and transparent **conductive** coatings containing carbon nanotubes
IN Luo, Jiazhong, Acton, MA, UNITED STATES
Glatkowski, Paul J., Littleton, MA, UNITED STATES
Wallis, Philip, Barrington, RI, UNITED STATES
PI US 2005209392 A1 20050922
AI US 2004-14233 A1 20041217 (11)
PRAI US 2003-529735P 20031217 (60)
US 2004-549159P 20040303 (60)
DT Utility
FS APPLICATION
LREP MORRISON & FOERSTER LLP, 1650 TYSONS BOULEVARD, SUITE 300, MCLEAN, VA, 22102, US
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 1026
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to flexible, transparent and **conductive** coatings and films formed using single wall carbon nanotubes and **polymer** binders. Preferably, coatings and films are formed from carbon nanotubes (CNT) applied to transparent substrates forming one or multiple **conductive** layers at nanometer level of thickness. **Polymer** binders are applied to the CNT network coating having an open structure to provide protection through infiltration. This provides for the enhancement of properties such as moisture resistance, thermal resistance, abrasion resistance and interfacial adhesion. **Polymers** may be thermoplastics or thermosets, or any combination of both. **Polymers** may also be insulative or inherently electrical **conductive**, or any combination of both. **Polymers** may comprise single or multiple layers as a basecoat underneath a CNT coating, or a topcoat above a CNT coating, or combination of the basecoat and the topcoat forming a sandwich structure. Binder coating thickness can be adjusted by changing binder concentration, coating speed and/or other process conditions. Resulting films and articles can be used as transparent conductors for flat panel display, touch screen and other electronic devices.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 5 OF 14 USPATFULL on STN
AN 2005:240304 USPATFULL
TI Coatings for carbon nanotubes

IN Collier, Charles Patrick, San Marino, CA, UNITED STATES
Giapis, Konstantinos P., Pasadena, CA, UNITED STATES
Esplandiu, Maria J., Premia de Mar, SPAIN
PA California Institute of Technology, Pasadena, CA, UNITED STATES (U.S. corporation)
PI US 2005208304 A1 20050922
AI US 2005-126795 A1 20050510 (11)
RLI Continuation-in-part of Ser. No. US 2004-783713, filed on 20 Feb 2004, PENDING
PRAI US 2003-449210P 20030221 (60)
US 2004-582683P 20040624 (60)
US 2004-583122P 20040625 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US
CLMN Number of Claims: 48
ECL Exemplary Claim: 1
DRWN 32 Drawing Page(s)
LN.CNT 1831
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A coated nanotube that includes an inner nanotube having an exterior surface, and a plasma deposited layer covering at least part of the exterior surface of the inner nanotube. Also, a method of making a coated nanotube, the method where the method includes the steps of generating a plasma from a coating precursor, and exposing an inner nanotube to the plasma, where a plasma deposited layer is formed on at least a portion of the inner nanotube. Additionally, a method of making a coated nanotube that includes the steps of providing an inner nanotube, and evaporating a metal into the inner nanotube, where the metal forms a coating layer on at least a portion of the inner nanotube.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 6 OF 14 USPATFULL on STN
AN 2005:76439 USPATFULL
TI **Sensor** platform using a non-horizontally oriented nanotube element
IN Segal, Brent M., Woburn, MA, UNITED STATES
Rueckes, Thomas, Rockport, MA, UNITED STATES
Vogeli, Bernhard, Boston, MA, UNITED STATES
Brock, Darren, Elmsford, NY, UNITED STATES
Jaiprakash, Venkatachalam C., Fremont, CA, UNITED STATES
Bertin, Claude L., South Burlington, VT, UNITED STATES
PA Nantero, Inc., Woburn, MA (U.S. corporation)
PI US 2005065741 A1 20050324
AI US 2004-844883 A1 20040512 (10)
PRAI US 2003-470410P 20030514 (60)
US 2003-470371P 20030514 (60)
US 2003-501143P 20030908 (60)
DT Utility
FS APPLICATION
LREP WILMER CUTLER PICKERING HALE AND DORR LLP, 60 STATE STREET, BOSTON, MA, 02109
CLMN Number of Claims: 78
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 1915
AB **Sensor** platforms and methods of making them are described. A platform having a non-horizontally oriented **sensor** element comprising one or more nanostructures such as nanotubes is described. Under certain embodiments, a **sensor** element has or is made to have an affinity for an analyte. Under certain embodiments, such a **sensor** element comprises one or more pristine nanotubes. Under certain embodiments, the **sensor** element comprises derivatized or functionalized nanotubes. Under certain embodiments, a **sensor** is made by providing a support structure; providing one or more nanotubes on the structure to provide material for a **sensor**

element; and providing circuitry to electrically sense the **sensor** element's electrical characterization. Under certain embodiments, the **sensor** element comprises pre-derivatized or pre-functionalized nanotubes. Under other embodiments, **sensor** material is derivatized or functionalized after provision on the structure or after patterning. Under certain embodiments, a large-scale array of **sensor** platforms includes a plurality of **sensor** elements.

L7 ANSWER 7 OF 14 USPATFULL on STN
AN 2005:62490 USPATFULL
TI **Sensor** platform using a horizontally oriented nanotube element
IN Segal, Brent M., Woburn, MA, UNITED STATES
Rueckes, Thomas, Boston, MA, UNITED STATES
Vogeli, Bernhard, Boston, MA, UNITED STATES
Brock, Darren, Elmsford, NY, UNITED STATES
Jaiprakash, Venkatachalam C., Fremont, CA, UNITED STATES
Bertin, Claude L., South Burlington, VT, UNITED STATES
PA Nantero, Inc., Woburn, MA (U.S. corporation)
PI US 2005053525 A1 20050310
AI US 2004-844913 A1 20040512 (10)
PRAI US 2003-470410P 20030514 (60)
US 2003-470371P 20030514 (60)
US 2003-501143P 20030908 (60)
DT Utility
FS APPLICATION
LREP WILMER CUTLER PICKERING HALE AND DORR LLP, 60 STATE STREET, BOSTON, MA, 02109
CLMN Number of Claims: 158
ECL Exemplary Claim: 1
DRWN 34 Drawing Page(s)
LN.CNT 2412
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **Sensor** platforms and methods of making them are described, and include platforms having horizontally oriented **sensor** elements comprising nanotubes or other nanostructures, such as nanowires. Under certain embodiments, a **sensor** element has an affinity for an analyte. Under certain embodiments, such a **sensor** element comprises one or more pristine nanotubes, and, under certain embodiments, it comprises derivatized or functionalized nanotubes. Under certain embodiments, a **sensor** is made by providing a support structure; providing a collection of nanotubes on the structure; defining a pattern within the nanotube collection; removing part of the collection so that a patterned collection remains to form a **sensor** element; and providing circuitry to electrically sense the **sensor**'s electrical characterization. Under certain embodiments, the **sensor** element comprises pre-derivatized or pre-functionalized nanotubes. Under certain embodiments, **sensor** material is derivatized or functionalized after provision on the structure or after patterning. Under certain embodiments, a large-scale array includes multiple **sensors**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 8 OF 14 USPATFULL on STN
AN 2004:234268 USPATFULL
TI Computer program products and systems for rapidly changing the solution environment around **sensors**
IN Wigstrom, Joakim, Frolunda, SWEDEN
Sinclair, Jon, Goteborg, SWEDEN
PA Cellectricon AB (non-U.S. corporation)
PI US 2004181343 A1 20040916
AI US 2003-698599 A1 20031031 (10)
PRAI US 2002-423197P 20021101 (60)
DT Utility
FS APPLICATION
LREP EDWARDS & ANGELL, LLP, P.O. Box 9169, Boston, MA, 02209

CLMN Number of Claims: 161
ECL Exemplary Claim: 1
DRWN 26 Drawing Page(s)
LN.CNT 3486
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides computer program products for coordinating the movement of cells and other components in a microfluidic substrate with data acquisition. The microfluidic workstation may be used to examine the physiological responses of ion channels, receptors, neurons, and other cells to fluidic streams. The system may also be useful for screening compound libraries to search for novel classes of compounds, screening members of a given class of compounds for effects on specific ion channel proteins and receptors, and to rapidly determine dose-response curves in cell-based assays.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 9 OF 14 USPATFULL on STN
AN 2003:131821 USPATFULL
TI Nanoscale wires and related devices
IN Lieber, Charles M., Lexington, MA, UNITED STATES
Duan, Xiangfeng, Somerville, MA, UNITED STATES
Cui, Yi, Union City, CA, UNITED STATES
Huang, Yu, Cambridge, MA, UNITED STATES
Gudiksen, Mark, Watertown, MA, UNITED STATES
Lauhon, Lincoln J., Boston, MA, UNITED STATES
Wang, Jianfang, Goleta, CA, UNITED STATES
Park, Hongkun, Lexington, MA, UNITED STATES
Wei, Qingqiao, Corvallis, OR, UNITED STATES
Liang, Wenjie, Somerville, MA, UNITED STATES
Smith, David C., Midanbury, UNITED KINGDOM
Wang, Deli, Cambridge, MA, UNITED STATES
Zhong, Zhaohui, Cambridge, MA, UNITED STATES
PI US 2003089899 A1 20030515
AI US 2002-196337 A1 20020716 (10)
RLI Continuation-in-part of Ser. No. US 2002-152490, filed on 20 May 2002, ABANDONED Continuation-in-part of Ser. No. US 2002-152490, filed on 20 May 2002, ABANDONED Continuation-in-part of Ser. No. US 2001-935776, filed on 22 Aug 2001, PENDING
PRAI US 2001-292045P 20010518 (60)
US 2001-291896P 20010518 (60)
US 2002-354642P 20020206 (60)
US 2001-348313P 20011109 (60)
US 2000-226835P 20000822 (60)
US 2001-292121P 20010518 (60)
US 2001-292035P 20010518 (60)
US 2000-254745P 20001211 (60)
DT Utility
FS APPLICATION
LREP WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE, BOSTON, MA, 02210-2211
CLMN Number of Claims: 709
ECL Exemplary Claim: 1
DRWN 94 Drawing Page(s)
LN.CNT 7456
AB The present invention relates generally to sub-microelectronic circuitry, and more particularly to nanometer-scale articles, including nanoscale wires which can be selectively doped at various locations and at various levels. In some cases, the articles may be single crystals. The nanoscale wires can be doped, for example, differentially along their length, or radially, and either in terms of identity of dopant, concentration of dopant, or both. This may be used to provide both n-type and p-type **conductivity** in a single item, or in different items in close proximity to each other, such as in a crossbar array. The fabrication and growth of such articles is described, and the arrangement of such articles to fabricate electronic, optoelectronic, or spintronic devices and components. For example, semiconductor materials can be doped to form n-type and p-type semiconductor regions for making

a variety of devices such as field effect transistors, bipolar transistors, complementary inverters, tunnel diodes, light emitting diodes, **sensors**, and the like.

L7 ANSWER 10 OF 14 USPATFULL on STN
AN 2003:93173 USPATFULL
TI Nanoparticle optical storage apparatus and methods of making and using same
IN Chen, Wei, Stillwater, OK, UNITED STATES
PI US 2003064532 A1 20030403
AI US 2002-223764 A1 20020819 (10)
RLI Continuation-in-part of Ser. No. US 2002-166313, filed on 6 Jun 2002, PENDING
PRAI US 2002-356542P 20020211 (60)
US 2001-313236P 20010817 (60)
DT Utility
FS APPLICATION
LREP Attn: Douglas J. Sorocco, Dunlap, Codding & Rogers, P.C., P.O. Box 16370, Oklahoma City, OK, 73113
CLMN Number of Claims: 66
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 2150
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates in general to nanoparticles exhibiting luminescence such as photostimulated luminescence or photoluminescence and optical switching processes based upon such properties, in more particular, the use of such photostimulated luminescence exhibiting nanoparticles and switching nanoparticle for optical storage apparatuses and **sensors** as well as methods of making and using same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 11 OF 14 USPATFULL on STN
AN 2002:221316 USPATFULL
TI Methods and products for analyzing **polymers**
IN Chan, Eugene Y., Brookline, MA, UNITED STATES
PI US 2002119455 A1 20020829
AI US 2001-852968 A1 20010510 (9)
RLI Division of Ser. No. US 1998-134411, filed on 13 Aug 1998, PATENTED
PRAI WO 1998-US3024 19980211
US 1997-64687P 19971105 (60)
US 1997-37921P 19970212 (60)
DT Utility
FS APPLICATION
LREP Helen C. Lockhart, Esq., Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210
CLMN Number of Claims: 159
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 6864
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and products for analyzing **polymers** are provided. The methods include methods for determining various other structural properties of the **polymers**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 12 OF 14 USPATFULL on STN
AN 2002:77157 USPATFULL
TI Insulated **nanoscopic pathways**, compositions and devices of the same
IN Swager, Timothy M., Newton, MA, UNITED STATES
PI US 2002040805 A1 20020411
AI US 2001-777725 A1 20010205 (9)
PRAI US 2000-180357P 20000204 (60)
DT Utility

FS APPLICATION
LREP Timothy J. Oyer, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210
CLMN Number of Claims: 122
ECL Exemplary Claim: 1
DRWN 24 Drawing Page(s)
LN.CNT 1765
AB The present invention relates to compositions which provide an insulated **nanoscopic pathway**. The **pathway** comprises molecules, **polymers** or **nanoscopic** particles capable of conducting charge integrated with **nanoscopic** switches which are capable of electronic communication with the charge-conducting species. Turning "on" the **nanoscopic switch** electronically "connects" the various molecules/particles, such that a continuous **nanoscopic pathway** results. The **nanoscopic pathway** can be used in a **sensor**, where the switches can act as receptors for analytes. Binding of an analyte can result in a variety of effects on the **nanoscopic pathway**, including altering the **conductivity** of the **nanoscopic pathway**.

L7 ANSWER 13 OF 14 USPATFULL on STN
AN 2002:50774 USPATFULL
TI Methods and products for analyzing **polymers**
IN Chan, Eugene Y., Brookline, MA, United States
PA US Genomics, Woburn, MA, United States (U.S. corporation)
PI US 6355420 B1 20020312
AI US 1998-134411 19980813 (9)
RLI Continuation of Ser. No. WO 1998-US3024, filed on 11 Feb 1998
PRAI US 1997-37921P 19970212 (60)
US 1997-64687P 19971105 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Taylor, Janell E.
LREP Wolf, Greenfield & Sacks, P.C.
CLMN Number of Claims: 123
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 6818
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and products for analyzing **polymers** are provided. The methods include methods for determining various other structural properties of the **polymers**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 14 OF 14 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
AN 2001-648168 [74] WPIDS
DNN N2001-484360 DNC C2001-191171
TI Insulated **nanoscopic pathway** articles, for use as **sensors** for variety of analytes, comprises **nanoscopic pathway** having **conductivity**, dielectric insulating **nanoscopic pathway**, and **nanoscopic switch** which alters **nanoscopic pathway**.
DC A26 A85 B04 D16 X12
IN SWAGER, T M
PA (SWAG-I) SWAGER T M; (MASI) MASSACHUSETTS INST TECHNOLOGY
CYC 23
PI WO 2001057140 A1 20010809 (200174)* EN 79
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
W: CA JP
US 2002040805 A1 20020411 (200227)
EP 1263887 A1 20021211 (200301) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
ADT WO 2001057140 A1 WO 2001-US3784 20010205; US 2002040805 A1 Provisional US 2000-180357P 20000204, US 2001-777725 20010205; EP 1263887 A1 EP 2001-907013 20010205, WO 2001-US3784 20010205

FDT EP 1263887 A1 Based on WO 2001057140
PRAI US 2000-180357P 20000204; US 2001-777725 20010205
AN 2001-648168 [74] WPIDS
AB WO 200157140 A UPAB: 20011217
NOVELTY - An article (I), comprising a **nanoscopic pathway** having **conductivity**, a dielectric insulating the **nanoscopic pathway**, and a **nanoscopic switch**, in electric communication and capable of altering the **conductivity** of the **nanoscopic pathway**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a **sensor** comprising (I) for detecting an analyte;

(2) a composition comprising a **nanoscopic pathway** with a resistance of less than 10-4 times that of a **polymer** isolating the **pathway**; and

(3) a method of altering **conductivity** comprising providing article (I), insulating the **nanoscopic pathway**, and activating the **nanoscopic switch** in the article.

USE - The insulated **nanoscopic pathway** articles are useful for devices, compositions and methods involving conduction **pathways** of **nanoscopic** thickness, especially **sensors** for a variety of electrolytes (claimed).

ADVANTAGE - A **sensor** is provided with improved signal amplification for **sensors** requiring heightened sensitivity.

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic cross-section of an article having a **nanoscopic pathway** isolated by a dielectric including **nanoscopic** switches.

Article 2

Nanoscopic pathway 4

Minimum dimension 5

Dielectric 6

Nanoscopic switches 8

Dwg.1/26

=>